DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
>
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
>
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
>
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
>
> manner in which the invention was made.

2.   Claims 1, 2, 4, 5, 7 – 10, 15 – 18, 20, 24 – 32, and 38 - 42 are rejected under 35

U.S.C. 103(a) as being unpatentable over Enomoto (US 6714254) in view of Lamkin et

al (US 2002/0078144)

Regarding **claim 1**, Enomoto discloses an apparatus to reproduce interactive

content from an information storage medium, the interactive content including

audio/visual (AV) data including audio data and video data, a markup document, and/or

a markup resource file, the apparatus comprising:

a font controller (fig 1, 10, controller) to determine a pixel aspect ratio of a font

according to aspect ratio information (col 3, lines 7 – 14, aspect ratio of font) and

resolution information (col 4, lines 49 – 59, aspect ratio of monitor) to performs a

preprocess of enlarging or reducing a size of the font according to the determined pixel

aspect ratio (figs 4 a, b and c, col 3, lines 39 to col 4, line 25) and to outputs the

preprocessed font data according to a change in the aspect ratio and resolution of the

screen on which the interactive content is displayed (fig 5, col 4, lines 47 – 67).

However Enomoto does not disclose resolution information of the markup document.

On the other hand Lamkin et al teaches resolution information of the markup document (paras 0062 and 0073 markup language)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate resolution information of the markup document as taught by Lamkin et al in the system of Enomoto in order to effectively display combined content on the display.

(Note: Since the preamble contains limitation that is not included in the body of the claim, therefore these limitations are not being responded to)

Regarding **claim 2**, Enomoto discloses the apparatus (see claim 1 above) except for wherein the aspect ratio information is embedded in the markup document using a tag

However Lamkin et al teaches the aspect ratio information is embedded in the markup document using a tag (paras 0062 and 0073 markup language and para 0074 tag)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the aspect ratio information is embedded in the markup document using a tag as taught by Lamkin et al in the system of Enomoto in order for presentation engine to effectively display combined content on the display.

Regarding **claim 4**, Enomoto discloses the apparatus, wherein when the tag for the aspect ratio information of the markup document does not exist in the markup

document, basic screen aspect ratio information set in the reproducing apparatus is used as screen aspect ratio information of the markup document (figs 4 a,b and c, col 3, lines 39 to col 4, line 25 illustrate utilizing screen aspect ratio in apparatus)

However Enomoto does not disclose markup document.

On the other hand Lamkin et al teaches resolution information of the markup document (paras 0062 and 0073 markup language)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate resolution information of the markup document as taught by Lamkin et al in the system of Enomoto in order to effectively display combined content on the display.

Regarding **claim 5**, Enomoto discloses the apparatus, wherein the font controller stores matrix information indicating values to enlarge or reduce the font according to the aspect ratio information of the markup document (col 4, lines 7 - 25 illustrates information regarding font sizes)

However Enomoto does not disclose markup document.

On the other hand Lamkin et al teaches resolution information of the markup document (paras 0062 and 0073 markup language)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate resolution information of the markup document as taught by Lamkin et al in the system of Enomoto in order to effectively display combined content on the display.

Regarding **claim 15**, Enomoto discloses the apparatus, further comprising:

a decoder, to decode the AV data read by the reader and to outputs a video

image and a sub-image (col 2, lines 54 – 63, audio/video data and output video image

and col 3, lines 4 – 14 output sub-image (sub-titles)) and

a blender, to blend the AV data and a rendered markup document so that the AV

data is displayed on a display window of a display apparatus defined by the markup

document (col 3, lines 7 – 14 illustrate a controller as a blender to display AV data

defined by the character data memory)

wherein the blender comprises:

a video converter, which convert to convert a format of the video image into a

pan and scan format or a letterbox format according to a screen aspect ratio and a

resolution of the display apparatus or to outputs the video image as without a

conversion thereof, a first mixer, to mix the video image from the video converter and

the sub-image, a video position/image size controller, to control a position of the

mixed image from the first mixer and a size of an AV image displayed on a screen of

the display apparatus according to input video layout information, a graphic image

converter, to convert a size of a graphic image of a markup image source provided

from the presentation engine, a second mixer, to mix an output of the video

position/image size controller and an output of the graphic image converter and to

outputs the result of mixing to the display apparatus so that the result of mixing may be

displayed on the screen of the display apparatus, and a controller, to control the video

converter and the graphic image converter according to the screen aspect ratio and the

resolution of the display apparatus (fig 1, col 2, line 43 to col 3, line 13 illustrate all the

functionality of the blender even though it does not specifically disclose the equipments

mentioned in the claim)

However Enomoto does not disclose markup document.

On the other hand Lamkin et al teaches resolution information of the markup

document (paras 0062 and 0073 markup language)

It would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate resolution information of the markup document as taught by

Lamkin et al in the system of Enomoto in order to effectively display combined content

on the display.

Regarding **claim 39**, Enomoto discloses the apparatus (see claim 1 and 32

above) except for wherein the markup document comprises an interactive image

display file.

However Lamkin et al teaches wherein the markup document comprises

an interactive image display file (paras 0062 and 0073 markup language and para

0166 interactive image display)

It would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate wherein the markup document comprises an interactive image

display file as taught by Lamkin et al in the system of Enomoto in order for presentation

engine to effectively display combined content on the display.

Claims 7, 16 and 32 are rejected based on claim 1 above

Claims 8 and 17 are rejected based on claim 2 above

Claims 9 and 18 are rejected based on claim 4 above

Claim 10 is rejected based on claim 5 above with the added limitation of font decoder disclosed by Enomoto in fig 1, parts 7 and 12, col 3, lines 7 – 14)

Claim 20 is rejected based on claim 5 above

Claims 24 – 31 and 38 are rejected based on claim 15 above

Claim 40 is rejected based on claims 1 and 15 above

Claims 41 and 42 are rejected based on claims 1 and 39 above

3.   Claims 3, 12, 19 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto (US 6714254) in view of Lamkin et al (US 2002/0078144) and further in view of Fujimoto (JP 11143441 A)

Regarding **claim 3**, Enomoto discloses the apparatus, wherein the markup document contains resolution information and screen aspect ratio information indicating a 16:9 screen (fig 4 a, col 3, lines 41 – 45, 16:9 screen) a 4:3 (fig 4 b, col 3, lines 46 – 50, 4:3 screen) screen, a 1:1 screen, or no-relation to the screen aspect ratio which includes a case where no aspect ratio is set for the markup document.

However Enomoto and Lamkin et al do not disclose a 1:1 screen

On the other hand Fujimoto teaches 1:1 screen (abstract)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate 1:1 screen as taught by Fujimoto in the combined system of Enomoto and Lamkin et al in order to display the TV image signal with excellent quality.

Regarding **claim 43**, Enomoto, Lamkin et al and Fujimoto disclose a method of reproducing interactive content to be used with a reproducing

apparatus, comprising:

determining whether a markup document contains aspect ratio information9claim

3 above)

inputting the aspect ratio information as screen aspect ratio information, if the

markup document contains the aspect ratio information (claim 4 above)

inputting basic screen aspect ratio information set in the reproducing apparatus

as the screen aspect ratio information, if the markup document does not contain the

aspect ratio information (claim 4 above)

enlarging or reducing a font of the markup document using matrix information

corresponding to the inputted screen aspect ratio information (claim 5 above);

rasterizing font data composed of control points resulting from the enlargement

or reduction of the font for display (claim 1 and 5 above) and

displaying the rasterized font data (claim 1 above)

Claims 12 and 19 are rejected based on claim 3 above.

4.   Claims 6, 11 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Enomoto (US 6714254) in view of Lamkin et al (US 2002/0078144) in view of

Fujimoto (JP 11143441 A) and further in view of Kikuchi et al (US 2002/0054754)

Regarding **claim 6**, Enomoto discloses the apparatus , wherein the matrix

information comprises a matrix used for an aspect ratio of 4:3, (fig 4 b, col 3, lines 46 –

50, 4:3 screen) a matrix used for an aspect ratio of 16:9, (fig 4 a, col 3, lines 41 – 45,

16:9 screen) except for a matrix used for a basic aspect ratio of 14:9, and a matrix

used for an aspect ratio of 1:1.

On the other hand Fujimoto teaches 1:1 aspect ratio (abstract)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate 1:1 aspect ratio as taught by Fujimoto in the combined system of Enomoto and Lamkin et al in order to display the TV image signal with excellent quality.

The combination of Enomoto, Lamkin et al and Fujimoto does not disclose 14:9 aspect ratio

On the other hand Kikuchi et al teaches 14:9 aspect ratio (para 0054)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate 14:9 aspect ratio as taught by Kikuchi et al in the combined system of Enomoto, Lamkin et al and Fujimoto in order to display utilizing effective aspect ratio information.

Claims 11 and 21 are rejected based on claim 6 above.

5.   Claims 13, 14, 22, 23, 33 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto (US 6714254) in view of Lamkin et al (US 2002/0078144) in view of Fujimoto (JP 11143441 A) and further in view of Clatanoff et al (US 5864367)

Regarding **claim 13**, Enomoto discloses the apparatus (see claim 7 and 12 above) except for wherein, when the screen aspect ratio information indicates the 4:3 screen, the font decoder enlarges the font having a square pixel aspect ratio to have a first ratio and outputs the enlarged font to the 4:3 screen so that the enlarged font having the first ratio is reduced and displayed at almost the square pixel aspect ratio on the 4:3 screen.

However Clatanoff et al teaches when the screen aspect ratio information indicates the 4:3 screen, the font decoder enlarges the font having a square pixel aspect ratio to have a first ratio and outputs the enlarged font to the 4:3 screen so that the enlarged font having the first ratio is reduced and displayed at almost the square pixel aspect ratio on the 4:3 screen (fig 3 a, col 3, lines 49 – 62)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate when the screen aspect ratio information indicates the 4:3 screen, the font decoder enlarges the font having a square pixel aspect ratio to have a first ratio and outputs the enlarged font to the 4:3 screen so that the enlarged font having the first ratio is reduced and displayed at almost the square pixel aspect ratio on the 4:3 screen as taught by Clatanoff et al in the combined system of Enomoto, Lamkin et al and Fujimoto in order to improve the interpolation process in order to reduce system performance requirements and the cost.

Regarding **claim 14**, Enomoto discloses the apparatus (see claim 7 and 12 above) except for wherein, when the aspect ratio information indicates the 16:9 screen, the font decoder reduces the font, having a square pixel aspect ratio to have a second ratio and outputs the reduced font to the 16:9 screen so that the reduced font having the second ratio is enlarged and displayed at almost the square pixel aspect ratio on the 16:9 screen.

However Clatanoff et al teaches when the aspect ratio information indicates the 16:9 screen, the font decoder reduces the font, having a square pixel aspect ratio to have a second ratio and outputs the reduced font to the 16:9 screen so that the

reduced font having the second ratio is enlarged and displayed at almost the square

pixel aspect ratio on the 16:9 screen (fig 3 b, col 4, lines 4 – 15).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate when the aspect ratio information indicates the 16:9 screen,

the font decoder reduces the font, having a square pixel aspect ratio to have a second

ratio and outputs the reduced font to the 16:9 screen so that the reduced font having

the second ratio is enlarged and displayed at almost the square pixel aspect ratio on

the 16:9 screen as taught by Clatanoff et al in the combined system of Enomoto,

Lamkin et al and Fujimoto in order to improve the interpolation process in order to

reduce system performance requirements and the cost.

Claims 22, 33 and 37 are rejected based on claim 13 above.

Claim 23 is rejected based on claim 14 above.

6.   Claims 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Enomoto (US 6714254) in view of Lamkin et al (US 2002/0078144) and further in

view of Nakao (US 2003/0051215)

Regarding **claim 34**, Enomoto and Lamkin et al disclose the apparatus (see

claim 1 and 32 above) except for wherein the presentation engine is an analytical

engine to analyze markup languages and program languages.

On the other hand Nakao discloses the presentation engine is an analytical

engine to analyze markup languages (paras 0014 and 0015 markup language) and

program languages (para 0077 program language)

It would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate the presentation engine is an analytical engine to analyze

markup languages and program languages as taught by Nakao in the combined

system of Enomoto and Lamkin et al in order to effectively analyze and display markup

language.

Regarding **claim 36** Enomoto and Lamkin et al disclose the apparatus (see claim

1 and 32 above) except for wherein the presentation engine accesses the Internet.

On the other hand Nakao discloses the presentation engine accesses the

Internet (para 0081 illustrates presentation engine accessing the internet)

It would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate the presentation engine accesses the Internet as taught by

Nakao in the combined system of Enomoto and Lamkin et al in order to effectively

analyze and display markup language.

7.   Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Enomoto (US 6714254) in view of Lamkin et al (US 2002/0078144) and further in view

of Bowers et al (US 2003/0129573)

Regarding **claim 35**, Enomoto and Lamkin et al disclose the apparatus (see

claim 1 and 32 above) except for wherein the presentation engine includes plugins to

enable users to open markup resource files of various formats.

On the other hand Bowers et al discloses the presentation engine includes

plugins to enable users to open markup resource files of various formats (para 0077)

It would have been obvious to one of ordinary skill in the art at the time of the

invention to incorporate the presentation engine includes plugins to enable users to

open markup resource files of various formats as taught by Bowers et al in the

combined system of Enomoto and Lamkin et al in order for the plugins to be

customized to a client's needs without changing the core

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure

       Karow (US 5577170) discloses Generation of typefaces on high resolution output

devices

       Dees (US 2003/0137539) discloses Method of styling a user interface and device

with adaptive user interface

       Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Syed Y. Hasan whose telephone number is 571-270-

1082. The examiner can normally be reached on 9/8/5.

       If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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